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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,482	11/03/2003	Shigeo Ishida	117649	3222
25944	7590	05/31/2007		
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			EXAMINER HAUGLAND, SCOTT J	
			ART UNIT 3654	PAPER NUMBER
			MAIL DATE 05/31/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/698,482

Applicant(s)

ISHIDA ET AL.

Examiner

Scott Haugland

Art Unit

3654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 7, 8, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art of Fig. 2 and page 2, line 9 - page 3, line 16 of the specification in view of Focke et al (U.S. Patent No. 4,603,800) or over the admitted prior art in view of Ohba et al (U.S. Patent No. 6,592,276) and Focke et al.

The admitted prior art discloses a printing apparatus comprising a printing unit DA and a continuous paper transporting mechanism. The paper transporting mechanism comprises a frictionally transporting section 8, paper braking sections, a paper-position restriction section 3 having a pair of rollers 4 arranged at an oblique angle to the paper transporting direction, and buffer unit 10.

It appears that the printing section of the admitted prior art is disposed on a downstream side of the frictionally transporting section, as recited on the last two lines of claim 1 since elements 8 are disclosed as being feed rollers and they are immediately adjacent to the entrance of printing unit DA.

Assuming, arguendo, that the admitted prior art does not teach the downstream position of the printing section required by claims 1 and 11, Ohba et al teaches locating a printing section for printing on continuous paper web downstream of feed rollers 8, 9 of a paper transporting mechanism.

The admitted prior art does not disclose that the buffer unit is configured to separate from the surface of the continuous paper when the continuous paper is feeding forward (claims 1 and 11). The admitted prior art does not disclose that the paper position restricting section is arranged between the frictionally transporting section and the paper braking section (claim 2). The admitted prior art does not disclose that the pushing-out member is located at a position spaced apart from the paper during printing (claim 3).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to locate the printing section of the admitted prior art on the downstream side of the frictionally transporting section as taught by Ohba et al to feed the paper through the printing section without excessive tension in the printing section.

Focke et al teaches spacing rollers 33, 34 of a web accumulator apart during normal feeding and processing of the web so that the web is fed in a straight line without contact with the rollers. The rollers are moved into a web engaging and accumulating configuration only when the accumulator is required for temporary storage of a length of web. A control unit (col. 3, lines 63-col. 4, line 2) is provided for controlling operation of the buffer in correspondence with the operation of web feeding means.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the admitted prior art with an accumulator and associated control unit having pushing-out members or rollers that are moved away from the web being fed to the printer during printing and normal feeding of the web to the printer as taught by Focke et al to eliminate unnecessary interference of the accumulator with the web when it is not necessary to store additional web material.

With regard to claim 2, it would have been obvious to locate the restricting section between the braking section and transporting section to remove misalignment introduced in the web by the braking section before the web reaches the printer.

Claims 7 and 8 recite intended use. The modified apparatus of the admitted prior art is capable of use as claimed. In addition, with regard to claim 7, it would have been obvious to drive the buffer before and after reverse feeding to compensate for the spacing between the buffer rollers and the material (as in Focke et al) and to ensure that all of the slack in the reversely moving material is taken up. Additionally, with regard to claim 8, note that the buffer unit 10 of the admitted prior art would start driving when the frictionally transporting section starts to transport the paper toward the printer since the loop of paper around 10 starts to shorten when the feed rollers 13 start. Also, note that the buffer unit 10 is moved in a direction away from the surface of the paper as an amount of buffer of the continuous paper is decreased as in Applicants' invention.

Claims 5, 6, 9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art of Fig. 2 and page 2, line 9 - page 3, line 16 of the specification in view of Focke et al (U.S. Patent No. 4,603,800).

The admitted prior art is described above.

The admitted prior art does not disclose that the buffer unit is configured to separate from the surface of the continuous paper when the continuous paper is feeding forward or that the paper position restricting section is arranged between the frictionally transporting section and the paper braking section.

Focke et al teaches spacing rollers 33, 34 of a web accumulator apart during normal feeding and processing of the web so that the web is fed in a straight line without contact with the rollers. The rollers are moved into a web engaging and accumulating configuration only when the accumulator is required for temporary storage of a length of web. A control unit (col. 3, lines 63-col. 4, line 2) is provided for controlling operation of the buffer in correspondence with the operation of web feeding means.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the admitted prior art with an accumulator and associated control unit having pushing-out members or rollers that are moved away from the web being fed to the printer during printing and normal feeding of the web to the printer as taught by Focke et al to eliminate unnecessary interference of the accumulator with the web when it is not necessary to store additional web material.

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With regard to claim 5, it would have been obvious to locate the restricting section between the braking section and transporting section to remove misalignment introduced in the web by the braking section before the web reaches the printer.

Claims 9 and 10 recite intended use. The modified apparatus of the admitted prior art is capable of use as claimed. In addition, with regard to claim 9, it would have been obvious to drive the buffer before and after reverse feeding to compensate for the spacing between the buffer rollers and the material (as taught by Focke et al) and to ensure that all of the slack in the reversely moving material is taken up. Additionally, with regard to claim 10, note that the buffer unit 10 of the admitted prior art would start driving when the frictionally transporting section starts to transport the paper toward the printer since the loop of paper around 10 starts to shorten when the feed rollers 13 start. Also, note that the buffer unit 10 is moved in a direction away from the surface of the paper as an amount of buffer of the continuous paper is decreased as in Applicants' invention.

Response to Arguments

Applicants' arguments filed 3/6/07 have been fully considered but they are not persuasive.

Applicants argue that the prior art does not teach a control unit for controlling the operation of the buffer unit in correspondence with the operation of the back feeding unit after completion of printing. However, Focke et al teaches providing a controller to

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operate the buffer unit according to the requirements of a web feeding unit. While claims do not require a drive and control for reversely driving the transporting rollers for back feeding the web, the admitted prior art of Fig. 2 of Applicants' drawings and page 2, line 9 - page 3, line 16 of the specification clearly discloses reverse drive and feeding of the web from the printer DA.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Haugland whose telephone number is (571) 272-6945. The examiner can normally be reached on Mon. - Fri., 10:00 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


sjn
5/22/07


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